



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/521,791	03/09/2000	Chia-Chang Li	LUT-2-0035	3014
7590	03/08/2004		EXAMINER	
Richard J Minnich Esq Fay Sharpe Fagan Minnich & McKee LLP 1100 Superior Avenue Seventh Floor Cleveland, OH 44114			CHOW, CHARLES CHIANG	
			ART UNIT	PAPER NUMBER
			2685	
			DATE MAILED: 03/08/2004	

9

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/521,791	LI ET AL.	
	Examiner Charles Chow	Art Unit 2685	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 18 December 2003.
- 2a) This action is **FINAL**.      2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-20 is/are pending in the application.
  - 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) 1-19 is/are allowed.
- 6) Claim(s) 20 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All    b) Some \* c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                    | Paper No(s)/Mail Date. _____.   |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____. | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
|   | 6) <input type="checkbox"/> Other: _____.                                   |

**Response to Applicant's Amendment**  
**Received on 12/18/2003**

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hamilton-Piercy et al. (US 5,809,395) in view of Raffel et al. (US 5,675,629).

Regarding **claim 20**, Hamilton-Piercy teaches a method for integrating cable and wireless system communication network to provide telephone service (a public mobile system integrated with the CCMS, having fiber cable 209 connections to the hub/headend radio base equipment RBSE, abstract, Fig. 1, Fig. 11, Fig. 13, col. 11, line 65; col. 1, lines 10-17; summary of invention).

Hamilton-Piercy teaches the providing a first communication channel for communication through a personal base station (210 or CCMS) via an air interface [the mobile 206 operative to select one of a first communication channel provided by the interface unit (col. 16, lines 29-38), and the personal base station connecting to the cable network (the CCMS, OCMBS is connected to the cable network having headend/Hub (Fig. 1).

Hamilton-Piercy teaches the allowing communication through the second communication channel (203) for communication through a public base station of wireless communication network (the other RBS station via microwave 203, Fig. 1).

Hamilton-Piercy does not teach the providing data base structure including identification data for communication channel, the selection of first or second communication channel by a handset is based on the proximity to personal base station and on data stored in the handset, priority given to the first communication channel.

Raffel teaches the system comprises the mobile station 12 (fig. 1) in comm. with cordless cell base station CCBS 10 in residence area and also in comm. with the public cellular network having the cellular base station 18 (Fig. 1-6; col. 10, line 51 to col. 11, line 17). The cellular network downloads, from database, the parameters to CCBS 10 having the Public system SID, the residential RSID, the list of authorized frequencies, to identify the resources used by the comm. channels (col. 23, line 60 to col. 24, line 33). The mobile station 12 also stores the RSID, SID, operating channel 88 in the table 78 (col. 8, line 59 to col. 9, line 5; col. 19, lines 28-53; col. 20, lines 40-52; col. 23, line 60 to col. 24, line 29). Raffel teaches the handoff procedure, base on the stored RSID, SID, when mobile moves to the close range of the residential cordless-cellular-base-station CCBS 10 (abstract). Raffel teaches when the mobile 12 is outside residence CCBS 10's coverage area to deregister from the CCBS 10 using handoff procedure (col. 4, lines 46-57; col. 40, lines 29-39; col. 11, lines 52-55; col. 40, lines 29-39; col. 56, line 48). Raffel provides the detailed solution for downloading, from database, the RSID, SID, operating frequency 88, to CCBS 10, and also mobile 12 for storing the

above parameters, such that the parameters could be retrieved for convenient registration dynamically. Raffel teaches the downloaded the RSID, SID, operating frequency 88, to CCBS 10, and the mobile 12 could store, retrieve, them for conveniently, dynamically registration. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify Hamilton-Piercy, and to include Raffel's downloaded the RSID, SID, operating frequency 88 to CCBS 10, and the mobile 12 for storing, retrieving, them, such that the system could be upgraded for conveniently, dynamically, registration by retrieving the stored information for RSID, SID, and the operating channel.

***Reason for Allowance***

2. Claims 1-19 are allowable over the prior art of record.

The following is the examiner's statement for the reasons of allowance:

The prior art fails to teach singly, particularly, or in combination, the subject matter for the integrated cable and cellular network system having wireless communication network integrated with a cable communication network, including at least one of a distribution hub and a headend connected to the wireless communication network. A personal base station system provides digital network interface to distribution network, including an interface unit operative to provide an air interface to cable network. A handset unit to select one of the first communication channel through person base station system to cable communication network and a second communication channel through public base station, based on information stored on the handset, priority being given to the first communication channel, and a database structure positioned in one of the cable communication network and the wireless communication network, including identification data to facilitate communication through

one of the first and second communication channels, as shown in independent claims 1, 9, 16. The dependent claims are also allowable due to their dependency upon the independent claims.

The closest patent to Hamilton-Piercy et al. (US 5,809,395) teaches a public mobile system integrated with the coaxial connected microcell system CCMS, having fiber cable 209 connections to the hub/headend radio base equipment RBSE (abstract, Fig. 1, Fig. 11, Fig. 13, col. 11, line 65; col. 1, lines 10-17; summary of invention). The mobile 206 can communicate with other RBS sites via microwave link 203 and can also communicate with the CCMS cable system via headend. Hamilton-Piercy does not teach a handset unit to select one of the first and a second communication channel, based on information stored on the handset, priority being given to the first communication channel and a database structure including identification data to facilitate communication.

Other prior arts in below has been considered, but they do not teach the above claimed features.

Raffel-'629 teaches a mobile station 12 can communicate with both the public base station 18 and the residential cordless base station 10 (Fig. 1, abstract). Raffel does not teach the integration of wireless communication network with a cable network.

Chambers-'485, February 1999, Chambers et al. discloses the integrated fiber cable system has the remote node transceiver 14 for comm. with subscriber stations 36, 38, 40, 52, 54 over the air (abstract, figure in cover page, Fig. 1-5). The system comprising the modulator, demodulator, analog cable headend, internet server, hub, MUX, PSTN.

Chu-'055 teaches Chu et al. discloses the cable connected Hub 104 (abstract, Fig. 2, Fig. 1, summary of invention) for communicate with wireless device 10 over the air. The system comprises the personal base station (repeater 100-103)

Gerszberg-'416 A1, March 2002, Gerszberg et al. discloses the synchronous optical network SONET-ring-Hub distribution network (figure in cover page, abstract, Fig. 1-17), for providing the billing services of the system for the videophone 130.

Any comments considered necessary by applicant must be submitter no later than the payment of the issue fee, and to avoid processing delays, should preferably accompany the issue fee. Such submission should be clearly labeled "comments on statement of reasons for allowance".

3. Applicant's arguments with respect to claim 20 have been considered but are moot in view of the new ground(s) of rejection.

Regarding applicant's argument of combining Hamilton-Piercy with Raffel, Hamilton-Piercy teaches a wireless mobile system (col. 1, lines 10-17), and Raffel teaches a cordless cellular system (title, abstract). They are both in the same wireless cellular system for utilizing radio communication link for providing telephone service. Hamilton-Piercy teaches a mobile 206 can communication with a public mobile system integrated with the CCMS, and can also communicate with other RBS 203 via microwave link. Hamilton-Piercy does not teach the a handset unit for selecting first or the second communication channel based on the priority data information stored in the handset unit. Raffel teaches the mobile station 12 can select the communication channels (Fig. 1) for accessing cellular base station or residential cell 10

based on the database structure (Fig.6). Hamilton-Piercy is using a mobile 206 and Raffel is using a mobile station 12. Both are belongs to mobile equipment, therefore, it is obvious to combine Hamilton-Piercy to Raffel for accessing both networks by using the frequency, SID information stored in a table from Raffle.

4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).  
Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a). A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

***Conclusion***

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles Chow whose telephone number is (703)-306-5615.  
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Urban, can be reached at (703)-305-4385.  
Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to: (703) 872-9314 (for Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive,  
Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or  
proceeding should be directed to the Technology Center 2600 Customer Service Office  
whose telephone number is (703) 306-0377.

Charles Chow C.C.

February 26, 2004.



EDWARD F. URBAN  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600